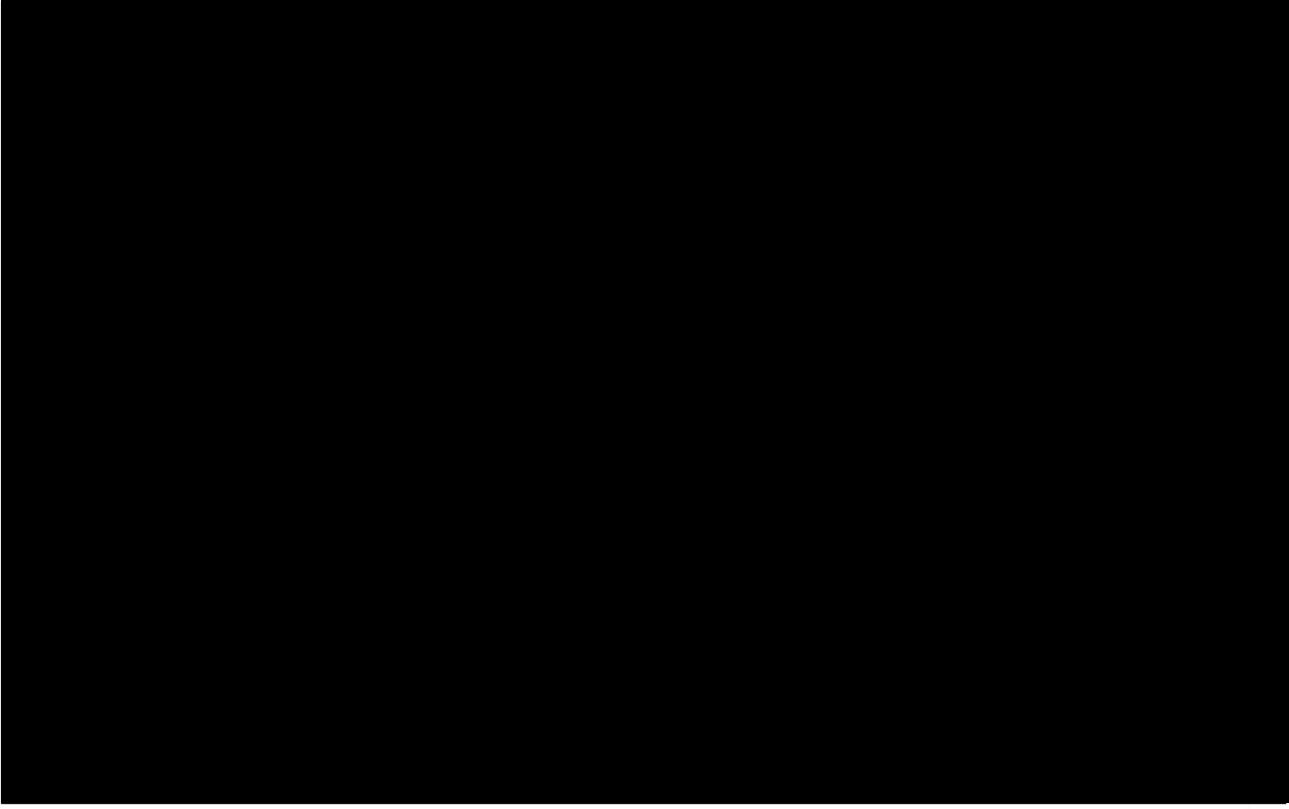


Prepared by AECOM



Golden, Derrick

From: Golden, Derrick
Sent: Wednesday, April 10, 2013 3:44 PM
To: Chris Allen; Doug Halley; Matt Mostoller
Cc: Barbara Weir; McWeeney, Jennifer (DEP); Jane Ceraso; 'info@actonaces.org'
Subject: W: March 2013 Monthly Remedial Action Status Report - W. R. Grace (Acton Plant) Superfund site - Acton & Concord, MA
Attachments: WR Grace March 2013 monthly RD-RA_status report.pdf

All,

Attached is the March 2013, monthly remedial action status report and the effluent results for the groundwater treatment systems at the W. R. Grace (Acton Plant) Superfund site - Acton & Concord, MA.

A hard copy has also been sent to the library.

Derrick S. Golden
Remedial Project Manager
United States Environmental Protection Agency
Region 1 - EPA New England
5 Post Office Square
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Boston, MA 02109-3912

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▼
de maximis, inc.

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April 7, 2013

Mr. Derrick Golden
United States Environmental Protection Agency
5 Post Office Square
Mail Code OSRR07-4
Boston, MA 02109-3912

Ms. Jennifer McWeeney
Massachusetts Department of Environmental Protection
One Winter Street
Boston, MA 02108

RE: Progress Report for March 2013
W.R. Grace Acton Superfund Site

Dear Mr. Golden and Ms. McWeeney:

On behalf of W.R. Grace, this Progress Report describes W. R. Grace's activities at the Acton Site during the month of February 2013:

I. Action Taken

Northeast Area Groundwater:

- Operated and maintained the Northeast Area Groundwater system. A summary of the average and instantaneous flow rates from the system, and sampling results, is attached.
- Performed the monthly system sampling on March 5, 2013. The results are attached and document continued compliance with the discharge criteria.

Monthly Progress Report – March 2013

W.R. Grace Acton Superfund Site

April 7, 2013

Page 2 of 3

Landfill Area Groundwater:

- Operated the Landfill Area Treatment System using a solution of 25 ug/l ADX added after the metals removal system, and prior to the Purifics photo-catalytic oxidation unit. Sampling performed on March 5, 2013 confirms this approach treats the 1,4-dioxane to below 3 ug/l. A summary of the results from that sampling event is attached.
- Redeveloped extraction wells MLF, SELF-1, and SELF-2.

II. Activities Scheduled for the Next Two Reporting Periods (April through May, 2013)

Northeast Area Groundwater:

- Continue operation of the NE Area treatment system through April 2013.
- Shut down and decommission the NE Area treatment system, pending EPA approval.

Landfill Area Groundwater:

- Continue system operation using the ADX dosage of 25 ug/l solution.
- Redevelop wells SWLF-2 and WLF.

III. Problems Encountered and Schedule Modifications

- None this reporting period.

IV. Community Relations Activities

- None this reporting period.

Monthly Progress Report – March 2013

W.R. Grace Acton Superfund Site

April 7, 2013

Page 3 of 3

Please do not hesitate to call me at 781-642-8775, should you have any questions.

Sincerely,

de maximis, inc.



Thor Helgason

CC: Robert Medler – Remedium Group
Lynne Gardner – Remedium Group
Anne Sheehan – GeoTrans
Dave Fuerst – O & M, Inc.
Jack Guswa – JG Environmental

Monthly Extraction Rates for Northeast Area Extraction Well NE-1

	Average	Instantaneous
Jan-13	19.2	19.9
Feb-13	19.8	19.9
Mar-13	19.6	19.6

Flow rates in gallons per minute.

Average - flow rate calculated using monthly totalizer readings

Instantaneous - rate indicated by flow meter during monthly monitoring

Northeast Area Groundwater Treatment System Sampling Results

	Discharge Standard	1/7/2013	2/6/2013	3/5/2013
Effluent (NE-1)				
VDC	NA	36	35	33
Benzene	NA	1.2	1.1	1
Vinyl Chloride	NA	1.4	1.2	U (0.5)
Arsenic, Total	NA	4.5	4.5	4.3
Iron, Total	NA	U (50)	110	22 J
Manganese, Total	NA	65	62	67
EPH				
2-Methylnaphthalene	NA	U (9.6)	0.071 J	0.12 J
Acenaphthene	NA	U (9.6)	U (0.48)	0.08 J
Acenaphthylene	NA	U (9.6)	U (0.29)	U (0.29)
Anthracene	NA	U (9.6)	U (0.48)	0.033 J
Benzo(a)anthracene	NA	U (9.6)	U (0.29)	U (0.29)
Benzo(q)pyrene	NA	U (9.6)	U (0.17)	U (0.19)
Benzo(b)fluoranthene	NA	U (9.6)	U (0.29)	U (0.29)
Benzo(g,h,i)perylene	NA	U (9.6)	U (0.48)	U (0.48)
Benzo(k)fluoranthene	NA	U (9.6)	U (0.29)	U (0.29)
Chrysene	NA	U (9.6)	U (0.48)	U (0.96)
Dibenz(a,h)anthracene	NA	U (9.6)	U (0.48)	U (0.48)
Fluoranthene	NA	U (9.6)	U (0.48)	0.087 J
Fluorene	NA	U (9.6)	U (0.48)	0.099 J
Indeno[1,2,3-cd]pyrene	NA	U (9.6)	U (0.48)	U (0.48)
Naphthalene	NA	U (9.6)	0.11 JB	0.24 J
Phenanthrene	NA	U (9.6)	0.062 JB	0.26 J
Pyrene	NA	U (9.6)	U (0.48)	U (4.8)
Aliphatics, C19-C36	NA	U (96)	U (98)	U (100)
Aliphatics, C9-C18	NA	U (96)	U (98)	U (100)
Aromatics, C11-C22, adjusted	NA	U (96)	U (98)	U (100)
VPH				
Benzene	NA	1.2	1.1	1
Ethylbenzene	NA	U (1)	U (1)	U (1)
Methyl tert-butyl ether	NA	U (1)	U (1)	U (1)
m&p Xylene	NA	U (2)	U (2)	U (2)
Naphthalene	NA	U (1)	U (1)	U (1)
o-Xylene	NA	U (1)	U (1)	U (1)
Toluene	NA	U (1)	U (1)	U (1)
C5-C8 Aliphatics, adjusted	NA	U (10)	U (100)	U (100)
C9-C10 Aromatics	NA	U (10)	U (100)	U (100)
C9-C12 Aliphatics, adjusted	NA	3.1	2.7 J	2.8 J
Effluent				
VDC	7	U (1)	U (1)	U (1)
Benzene	5	U (1)	U (1)	U (1)
Vinyl Chloride	2	U (0.5)	U (0.5)	U (0.5)
1,4-Dioxane	3	1.8	1.9	1.9
Arsenic, Total	10	4.3	4.2	4.2
Iron, Total	NA	92	160	190
Manganese, Total	300	61	59	60

Concentrations in $\mu\text{g/L}$.

U (1) - not detected at limit indicated in parentheses.

NA - Not applicable

Monthly Landfill Area Extraction Rates

Target Flow Rate (gpm)	MLF		SELF-1		SELF-2		SWLF-2		WLF		Total Landfill Area System	
	Average	Instantaneous	Average	Instantaneous								
Jan-13	39.3	40.4	0.7	0.8	1.4	1.4	5.9	6.1	9	9.3	56.3	58
Feb-13	31.8	37.1	0.5	0.6	1.2	1.4	5.2	6	6.6	7.8	45.3	52.9
Mar-13	25.1	35	0.5	0.8	0.5	0.8	5.4	6	6.5	7.4	38	50

Instantaneous - rate indicated by flow meter during monthly monitoring

Average - flow rate calculated using monthly totalizer readings

MLF, SELF-1 and SELF-2 were redeveloped in March.

SWLF-2 and WLF will be redeveloped in April.

Landfill Area Groundwater Treatment System Sampling Results

		Discharge Limits	1/8/13	2/6/13	3/5/13
Influent					
VOCs	VDC	NA	9.7	9.1	7.6
	1,2 Dichloroethane	NA	1.4	1.2	1.1
	1,2 Dichloropropane	NA	0.99 J	0.97 J	0.87 J
	2-Butanone (MEK)	NA	U(10)	U(10)	U(10)
Benzene		NA	12	8.3	10
Chloroethane		NA	U(2)	U(2)	U(2)
Methylene Chloride		NA	U(1)	U(1)	U(1)
MTBE		NA	U(1)	U(1)	U(1)
TCE		NA	U(1)	U(1)	U(1)
Vinyl Chloride		NA	4.4	3.3	U(0.5)
1,4 Dioxane		NA	3.1	3.2	2.8
SVOCs					
Bis(2-chloroethyl) ether		NA	U(9.4)	U(9.4)	U(9.5)
Bis(2-ethylhexyl) phthalate		NA	U(9.4)	U(9.4)	U(9.5)
Metals	Arsenic	NA	39	33	40
	Beryllium	NA	U(1)	U(1)	U(1)
	Chromium	NA	1.9 J	U(5)	U(5)
	Iron	NA	11000	8200	8500
	Lead	NA	10	0.43 J	0.43 J B
	Manganese	NA	3000	2700	3300
	Nickel	NA	20	14	15
Other	Phosphorus	NA	37	19	52
Effluent					
VOCs	VDC	MO	0.63 J	0.57 J	0.73 J
	1,2 Dichloroethane	MO	1.1	0.96 J	1.1
	1,2 Dichloropropane	MO	U(1)	U(1)	U(1)
	2-Butanone (MEK)	MO	U(10)	U(10)	U(10)
Benzene		MO	0.49 J	U(1)	0.51 J
Chloroethane		MO	U(2)	U(2)	U(2)
Methylene Chloride		MO	U(1)	U(1)	U(1)
MTBE		MO	U(1)	U(1)	U(1)
TCE		MO	U(1)	U(1)	U(1)
Vinyl Chloride		MO	U(0.5)	U(0.5)	U(0.5)
1,4 Dioxane		MO	1.9	2	2
SVOCs					
Bis(2-chloroethyl) ether		MO	U(9.6)	U(10)	U(9.6)
Bis(2-ethylhexyl) phthalate		MO	U(9.6)	U(10)	U(9.6)
Metals	Arsenic	4 ^a / 4*	0.75 J	0.73 J	1.1
	Beryllium	MO	U(1)	U(1)	U(1)
	Chromium III	\$79.3 / 27.7	U(5)	U(5)	U(5)
	Iron	NAC / 1000	U(30)	U(50)	U(50)
	Lead	14 / 0.5	0.63 J	0.66 J	0.63 J B
	Manganese	MO	4.8	7.9	0.79 J
	Nickel	145.2 / 16.1	9 J	9.2 J	11
Other	Phosphorus	NAC / 18	U(10)	U(10)	U(10)

Concentrations in $\mu\text{g/L}$.

U (1) - not detected at limit indicated in parentheses.

J - Estimated value

Discharge Limits - Maximum Daily / Average Monthly

MO - Monitoring Only

NA - Not applicable

NAC - No applicable criterion

* Interim arsenic limit

